

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.

Application Serial Number:

10/785,156

Source:

IFWO

Date Processed by STIC:

11-24-04

ENTERED



IFWO

RAW SEQUENCE LISTING

DATE: 11/24/2004

PATENT APPLICATION: US/10/785,156

TIME: 12:41:52

Input Set : A:\3840-006-27.ST25.txt

Output Set: N:\CRF4\11242004\J785156.raw

4 <110> APPLICANT: Sehgal, Lakshman R.

5 Wong, Jonathan

6 Seth, Prem

8 <120> TITLE OF INVENTION: Therapeutic Applications of Thrombomodulin Gene Via Viral

and

9 Non-Viral Vectors

11 <130> FILE REFERENCE: 3840-006-27

13 <140> CURRENT APPLICATION NUMBER: US 10/785,156

14 <141> CURRENT FILING DATE: 2004-02-25

16 <150> PRIOR APPLICATION NUMBER: US 60/449,408

17 <151> PRIOR FILING DATE: 2003-02-25

19 <160> NUMBER OF SEQ ID NOS: 6

21 <170> SOFTWARE: FastSEQ for Windows Version 4.0

23 <210> SEQ ID NO: 1

24 <211> LENGTH: 13599

25 <212> TYPE: DNA

26 <213> ORGANISM: Artificial Sequence

28 <220> FEATURE:

29 <223> OTHER INFORMATION: gutless backbone shuttle vector

31 <400> SEQUENCE: 1

32 catcatcaat aatatacctt attttggatt gaagccaata tgataatgag ggggtggagt 60
 33 ttgtgacgtg ggcgccccgc tgggaacggg gcgggtgacg tagtagtgtg gcggaagtgt 120
 34 gatgttgcaa gtgtggcgga acacatgtaa gcgaacgatg tggcaaaagt gacgtttttg 180
 35 gtgtgcgccg gtgtacacag gaagtgcacaa ttttcgcgcg gttttaggcg gatgttgtag 240
 36 taaatttggg cgtaaccgag taagatttgg ccattttcgc gggaaaactg aataagagga 300
 37 agtgaaatct gaataatttt gtgttactca tagcgcgtaa tactggtacc gcggccgcct 360
 38 cgagtctaga actagtggat cccccgggct gcaggaattc tgatggctct caaaattcct 420
 39 gcctccttta gggataaaaag actttaagac tttttaacaa aaaagaaaaa gaaaaaaaaa 480
 40 attcctgcct cctggtgtac acacacagaa gggttccctc cccttgaatg tgaccaggat 540
 41 ctgtgaaaat aacgggatag ccgctcctgt gattagggtta tgtggttagac tagagcaaga 600
 42 ttctcctgct ggttttgaag aagtcagctg ccattgtgtg agactgtcat gggctagggc 660
 43 atgagccttt aaatatctgg gagcaacccc tggccagcag ccagtgcagaa aacgggcccct 720
 44 cagtcttaca atcacaagga actaaattct gccacaacc tgaaggaaact ttgaagagga 780
 45 tcatgagtc cttgattcag cttgatgagc ccctgagcag aggatacagc taacttgtag 840
 46 tagggaagta taaaaaacat gcatgggaat gatatatatc aactttaagg ataattgtca 900
 47 tacttctggg aatgaaggga aagaaatggg gcttttagttg tattatgatac ttttaatttct 960
 48 caaaaaaat aagatcagaa gcaaatatgg caaaatgtta atacttttgt gggtagcgtag 1020
 49 gtattcagca tacccttttt tctgagttca aaatatatta taattaaaat gaaatgcagg 1080
 50 ccaggcacag ttgctcatgc ctataatacc agcactttgc gaggccgagg tgggagggatg 1140
 51 gcttgaggcc agaccagcct ggccaacatg gcaaaacccc atctctactt aaaaaaaaaa 1200
 52 aaactatata tatatatatg tgtgtgtgtg tgtatatata tatatgtata tatatttata 1260
 53 tatgtgtgta tatatatata tgtatatata tttatatatg tgtgtgtata tatatatata 1320
 54 cacacacaca catatatata tacatacata cacacacaca cacacacaat tagccaggca 1380
 55 tggtaggcgca cacctgtagt cccagctact tgggaggctg agacatgaga attgcttgaa 1440

(pg.6)

RAW SEQUENCE LISTING

DATE: 11/24/2004

PATENT APPLICATION: US/10/785,156

TIME: 12:41:52

Input Set : A:\3840-006-27.ST25.txt

Output Set: N:\CRF4\11242004\J785156.raw

```

56 cctgggaggc agagtagtta gtgagctgag atcataccac tgcactccag cctgggtgaca 1500
57 gagtggagact ctgtctttaa aaaaataaaa attaaaatta aatgcaaaag gtccaagtga 1560
58 attgaagagg aaaggggtat caaggagggt ttgtggagggt gacgtttgag ctgggtctta 1620
59 aatgacttaa acatgggata agaaggagggt gaataaggac attttcaggt acgagaaata 1680
60 aggagcaaac agtggaaca acctaacgtc tgtcaaccag tgaatggata acaaaaatgt 1740
61 aatcagatgg tatccaactt acgatggttc aacatgagat ttttctgact ttaggataga 1800
62 tttatcaaag tagtaaatcc attttcaact tatgatattt tcaacttcag atgggtttat 1860
63 caggacacag ttgaggaaca cctgtctatc catacaattt ggcaataaaa aggaaatgag 1920
64 tgcagatata ctccacaaca tgaatgaacc ttgaaaacat taagtggagag aagccagata 1980
65 caaaaggcca catattgtat gattctattt atacaaaatg tccagaatag gcaaacttta 2040
66 tagacagcaa gtaggttagat gatcagtttg ctagggtgctg ggggaagggg aaatggggag 2100
67 tgatggctaa ggggattggg tttctttgtg gggcaatgaa aatgttttaa aattgagcgt 2160
68 gataatgatt gcacaatgct gcataatat ataattctata gattatatat atataaagag 2220
69 aggtctgttag acagtgataa gtgatatata tatatatata catagagaga gagagagaga 2280
70 gagagagagg ctgttagtga taagtgatca ggaaaataaa agtattgagg aggaatacga 2340
71 agttgacggt gtgaaaacat gagattttat ataggatggc caggggaaggc cttaatgaga 2400
72 aagtgactta tgagtaaaaa caagggatcc taaaccttag catgcatcag aatcactcgg 2460
73 aaacttgtaa aagcatagct tgctgggcct catcacagat attttgatc ggtaggttct 2520
74 tgtctgatat taatactttt ggtctaggga accacatttt gagaaccact gagctaaagg 2580
75 aagtaaaagg ttcccttagt ttactagctg gtaaccctag gaaactgctt agcctctcgg 2640
76 tgctaagata caaaataact tagcacataa taacacatgg aaaatagtct ataaattata 2700
77 aatattattt tttatgtacc aaatattaca taagacaaaa tctaagcaag atatatatat 2760
78 atatacataa aatataagat atatatgtat atattatata tagataaata gagagagaga 2820
79 gttatgttta gaaagaaaat acttcaaact aaaaaagag aggtaggaag tataccattc 2880
80 cattattggt aaaaacaaat tactaagtag tctttacaaa aaaccaatct cactccttta 2940
81 gaacacaagc ccaccattaa aactgatgca gaggaatttc tctccctggc ttacctttag 3000
82 gatggtgcat actaagtttag aaaagtcata aatgtttat taaaagtaaa tgtgaactta 3060
83 ctccacaat caagacattc tagaagaaaa agagaaatga aaatcagtac aatgaataaa 3120
84 acggtatttc caattataag tcaaatcaca tcataacaac cctaaggaat tatccaaact 3180
85 cttgttttta gatgctttat tatatcaaac tctcctttta acaagtggcc catctgctgg 3240
86 gatttggaag cctgtaatac tgaaattttc atcaaatgg aaatttttaa aacagaattt 3300
87 gaccacctg tttttaaac actttcatta cttacaaga ggtctaact tgggcaagtc 3360
88 ttgaaatttc tctggcetta gtttccatgt gttaaatgaa acttgaagca gttggtctct 3420
89 tatagtctec tgactctaac attctaagaa ttatatattgt acaataactc aaaaatcaca 3480
90 taattttaatt taccatatgg actccaaaat atattttctc attaggctaa acttgatctg 3540
91 cattttctgg atgtgtccat attcttgga tacactaaaa catgatacca atgcttcctc 3600
92 tcaccataaa cccctcactt cgctttctac atttaagaat tttatagctg gaagagtcct 3660
93 taacagaaaa taccatctaa taattacccc tcaaaatcga gaaagtccta tctgttctta 3720
94 tgctagttat aagaatgagg cagcatttca cataatgggt ataaacactg ccacaagaag 3780
95 attcatgatg tgttgtttat ctgtagctct catcatactc tgtcatataa ctatagcatt 3840
96 aagattttta tgttctatat attcttctaa gacagtgttt accagagtaa ggcacaaaag 3900
97 atccactggt ttgcaagaaa gattagaact tttaaatttt ttacctcacc ttgtttaatc 3960
98 tatatttttg tatgtatttt gtaacatata tattattatt accataaatc atataata 4020
99 taaaatgcat atattagggt taaatgctca ggaaactttt tataaattgg gcatgcaaat 4080
100 acaagtttga agactcactg ttctaggtat taaaagtaaa gttataacca agtaaaagctt 4140
101 ccaccttttc atgtctcaaa gcagtttatt gttggaggta agatctctta gaagcctaaa 4200
102 cagggtccaag tacagaatga agtaaggcta gccataact tgtggcaagc aattcatact 4260
103 atttctctca tgctgagctc tctcagtgga agcagctact atagacaact gcagcctatt 4320
104 ggtagcctat tttacaggca ggaaaaaaat tactttttat tcaaagtga actcaggaca 4380

```

RAW SEQUENCE LISTING

DATE: 11/24/2004

PATENT APPLICATION: US/10/785,156

TIME: 12:41:52

Input Set : A:\3840-006-27.ST25.txt

Output Set: N:\CRF4\11242004\J785156.raw

```

105 tggggagaaa atgaatacaa aaaataggtc aatccaaagg cacacagcaa atgagtaaca 4440
106 cagttatggt tttttcccat ttgtatgagg tcccagtaaa ttctaagtaa actgcaaatt 4500
107 taataatata ctaaaaaaagc catgcaattg ttcaaataaa tcccagcatg gtacaaggag 4560
108 tacagacact agagtctaaa aaacaaaaga atgccattat tgagtttttg aattatatca 4620
109 agtagttaca tctctactta ataaatgaga aaaacgagga taagaggcca ttgataaaa 4680
110 tgaaaatagc caagaagtgg tattagagac ttgaatacag gtattcgggt ccaaagttca 4740
111 tctgctcaaa tactaactgg ggaaaagagg gaaaaatatt tatatacata tatatctgca 4800
112 cacaaaaata cccccaaaag acaaaatgag gccaggcagg gtggctcaca cccgtaatcc 4860
113 cgggtactttg ggaggctgag gcagggtgat acctgagatc aggagttgga gatcagcctg 4920
114 gtcaacatgg tgaaacctg tctctactaa agataaaaaa attagccagg catggtggcg 4980
115 tgcgcctgta atcccagcta cttgggagtc tgaggcagga gaatcactg aactgggaag 5040
116 gggaggttgc agtgagccaa gatcgtacta ctgcaactca gcctgggcag cagagtga 5100
117 ctccatcaca aaaataaata aataaataaa atacaatgaa acagaaagtt caaataatcc 5160
118 cataatctta ccaccaagaa ataactttca ctcggtatata ttattgattt ttccataata 5220
119 aatgtacttt actgtgacta tcatgaaaag aaagttattt tagaaacaga gaactgtttc 5280
120 agatcaaata tatgtagtag aacagagcca ttaggtggga aagacgagat caaactaaat 5340
121 ctcaagaagg ctaaaaggct aggtccattc cagcactaaa aactgaccag acaagtaatg 5400
122 gcttcaacag cttctaaata tggacaaaag atgctgaaag ggaaggacag gtctaacagt 5460
123 ggtatatgaa atgaacagga ggggcaaagc tcatttctcc tctgaagttt tccaaagatg 5520
124 ctgaggagga cattagtttg acatgacct gatatgggac aagataattt cacagaagtt 5580
125 ttacatgtta aagttttctt atagatactc attcaagtaa gcaatgaaca ctaaaatcta 5640
126 aagaaagaaa agagctttag agtcaggctc gtattcaaat tcaagctcta ccacttactg 5700
127 gttctgtgac tttgggcaag tcttttaacc ttattaagtc ttaatttctt gatttgtaaa 5760
128 atggggatat cgtctccctc acaggattgt tgtgaaactt ttatgagatt aatgccttta 5820
129 tatttggcat agtgtaagta aacaataact ggcagcttca aaaaaaaaaa gcagtagcat 5880
130 tccatcattt attattgggt actctcaaaa agtttttcaa tgtactagaa gataaatatt 5940
131 caaatacctt aatatctcca ttattttcag gtaaacagca tgctcctgaa caaccaatgg 6000
132 gtcaacaaat aaattaaaag ggaaatctaa aaacatcttg atattaaact acatggaagc 6060
133 acaatatacc aaaaccaatg gttcacacta ggagaatttt aaggtacaag aaaactcttt 6120
134 gagatttctt aaaaataatg tatgtctgaa tttattgagt gatttaccag aaactgttgt 6180
135 aagagctcta cttgcattat agcacttaat cctcttaact ctatggctgc tattatcaac 6240
136 ctcaccctaa tcacatatgg gacacagaga ggttaagtaa cttgcccagg gtcagagtta 6300
137 ggaagtacta agccatgctt tgaatcagtt gtcaggctcc ggaactcaca ctttcagcca 6360
138 ctacataata ctgctttgct atcttttagg aaactatgtg agtctacctc acatagactc 6420
139 acataggttt gttttttttt tttttttaa ggctatcttt tcccccatca atgttttttg 6480
140 aaggatccca aattagagtc ccacagaggc agacagcagt acttgacaat atggacattt 6540
141 aaggttaatg ttggattcta ctgtcttttt actacatgac ctagggaacg ataattaacc 6600
142 tagactgctt ccaagggtta aataaccat ttagttatac tatgtaaatt atctcttagt 6660
143 gattgattga aagcacactg ttactaattg actcggtatg aagtgccttt ttttcttccc 6720
144 tttcaagata catacctttc cagttaaaag tgagagatca tctccacca ttacttttat 6780
145 gtcccctggt gactggtcat tctagttaa aaaaaaaaaa actatatata tatatatcta 6840
146 cacacacata tgtatatgta tctccttatg tacacacaca aacttcaaat taaatgagaa 6900
147 ctagaagatt tgagaagtta gctagcta atccatagca ttatgatatt ctaaatgata 6960
148 tgaattataa gaattaggtt tcctgaaatg atgactaga aaactttcaa gtagagatta 7020
149 gtaaaaatta aaaagtccta atcgccatt actgatttga tgtttttaag agtcctaaaa 7080
150 aatgggttac atccattttt aagtggttag tattataaca gccacccatc ttcaatcaca 7140
151 gtgatttctg aattgtgagg gaagttatta gcatgacagg tgtctggttc tggccctgta 7200
152 cgattcccat gagtcaagca aattgtaagg gctggtctat atcacacca accccaagga 7260
153 tatgtccctc aaaagtcctg cccaggcccc gtcattctca gcatcatctg ggaaaccagg 7320

```

RAW SEQUENCE LISTING

DATE: 11/24/2004

PATENT APPLICATION: US/10/785,156

TIME: 12:41:52

Input Set : A:\3840-006-27.ST25.txt

Output Set: N:\CRF4\11242004\J785156.raw

```

154 tctgattagt agtcctttaa ggaatacctc ttaggctccc attttactgc tatcacagaa 7380
155 tccaataaaa cccttacagg agattcaatg ggaaatgctc aacacccact gtagttggtg 7440
156 gtgacaatga ccataatttg gctgtgctgg attcaggaga gaaaatttgg gtgaaaagagc 7500
157 aggtgaacaa aagagcttcg acttgcccta gcagagagca agccatacca taccacaaagc 7560
158 ccacagcaat tacaacgggtg cagtaaccagc acagtaaagt aacaaagtag agcccagaaa 7620
159 cagaccacaga actatatgag gatttagtat acaataaaga tgggtatttcg agtcagtagg 7680
160 gaaaagatga attattcaat aaatgatgtt tggccaacta gtaacccatt tgggaaaaaa 7740
161 taaaagtatg gtccctacct cacagcatac acaaaaaata attccagacg gattaaaaatc 7800
162 taaatgtaaa aaataaagcc ataagtggac tgggaagaaa tagagaattt tttttaacat 7860
163 ccgtagaaag ggtaaaaacc caggcatgac atgaaccaa actgaagagg ttctgtaaca 7920
164 aatacccctt tttatatatt gggctccaac aataagaacc cataggaaaa tggagaatga 7980
165 acacaaatag acaatttata gaagagaagg ttataagggtg taaaattata tctatctgag 8040
166 aaacaaacac taaaacaatg tgattctact gttctccac ccatactggc aaaacttaag 8100
167 cctgataata tgctgagggg aaataagcac tcttggtggt gagagtatta attggcatag 8160
168 cttcttttga aaatgacata gcaatacctg ttaaaattgc aaacatgcat gtcaactaat 8220
169 ccagtaatcc cacttctggg aatcaatgct acaaaaacac tgacaagtat acaaagatac 8280
170 attcaagagt gttcactggg ccgggtgctg tggcttcctg cctgtaatcc cagggaggca 8340
171 gaggcaagac gatcgcttga cccaggagt tcaaggccag cccgagaaac acagcaagac 8400
172 cctgtctctc ttttttttat ttaaaaaata aatgttccat gtatcagttg ttcacaaaaa 8460
173 caaaccaaca tgtccattaa cagggaacca tttaaattaa tcaagttcat ctacacaatg 8520
174 taataccatg caactattaa aaagcacctg ataatccaaa gcacactgag acagaataat 8580
175 gctattaaaa acaccaagta gtggaacact gtgttgctta tgacaccatt tttattcaac 8640
176 atttaaacaa atttgtaaca gcaattacat gagtagtgac aatggcggtt atgagacttt 8700
177 tcacttttat gtgcttctat ttttgttatg cttctatata tacatccatt tattatggag 8760
178 tgttactttc aaaaatcaca aatgggcccag tattatttgg tgttgcaagg tgagcatatg 8820
179 acttctgata tcaacctttg catattactt ctcaatttag ggaaattaca gacatccctt 8880
180 attctaacta acttaaaacc cagcatttca aacatacaga attgatgggg aaaaaaaaga 8940
181 aagaagaaag aaagaaaagg caacaagctt cagatgacag tgactcacat caaattattt 9000
182 ataaaaatctg ttaaatagtg ccattctctg gagatacctg gtattacagt ccaactccag 9060
183 ttgatgtctt tacagagaca agaggaataa aggaaaaaat attcaagaac tgaaaagtat 9120
184 ggagtcattg aaaaattgct gtgatccaaa ggctacgggt ataggacaag aaacaagaga 9180
185 actccaagca gtaagacact gctgttctat tagcatccaa acctccatac tcctgtttgc 9240
186 cccaaggctt ttttaaaaaa tagagacagg atctcactat tttgctcagg ctggtcttga 9300
187 actcctggac tcaagctatc ctctgcctc ggcctcctaa agtgccgaga ttacaggctt 9360
188 gagtcaccat acctggctat ttattttttc ttaactctct tgcttgccct atagccacca 9420
189 tgggaagctaa taaagaatat taatttaaga gtaatggtat agttcactac attggaatac 9480
190 aggtataagt gcctacattg tacatgaatg gcatacatgg atcaattacc ccacctgggt 9540
191 ggccaaagga actgcgcgaa cctccctcct tggctgtctg gaacaagctt cccactagat 9600
192 ccctttactg agtgccctcc tcactcttaa ttatgggtta gtctaggata acaggactgg 9660
193 caaaggtagg gggaaagctt cctccagagt tgctctaccc tctcctctac gtccctatctc 9720
194 ctcaactcctc tcagccaagg agtccaatct gtcctgaact cagagcgtca ctgtcaacta 9780
195 cataaaattg ccagagaagc tctttgggac taaaaacaca tacccttaat gtctttattt 9840
196 ctatttttgc tacctcttca gtctaggtga aaaaatagga aggataatag ggaagaactt 9900
197 tgtttatgcc tacttatccg cccctaggaa ttttgaaaac ctctaggtag caataagaac 9960
198 tgcagcatgg tatagaaaaa gaggaggaaa gctgtataga aatgcataat aaatgggcag 10020
199 gaaaagaact gcttgggaaca aacagggagg ttgaactata aggagagaaa gcagagaggc 10080
200 taatcaacaa ggctgggttc ccaagagggc atgatgagac tattactaag gtaggaatta 10140
201 ctaagggtc catgtccctt tagtggctta gtactatgta gcttgctttc tgcagtgaac 10200
202 ttcagacctt tcttttagga tcctagaatg gacttttttt ttttatcgga aaacagtcac 10260

```

RAW SEQUENCE LISTING

DATE: 11/24/2004

PATENT APPLICATION: US/10/785,156

TIME: 12:41:52

Input Set : A:\3840-006-27.ST25.txt

Output Set: N:\CRF4\11242004\J785156.raw

```

203 tctctcaaca ttcaagcagg ccccaagtct accacactca atcacatttt ctcttcatat 10320
204 cataatctct caaccattct ctgtcctttt aactgttttt ctataccctg atcaaatgcc 10380
205 aacaaaagtg agaattgttag aatcatgtat ttttagaggt agactgtatc tcagataaaa 10440
206 aaaaagggca gatattccat tttccaaaat atgtatgcag aaaaaataag tatgaaagga 10500
207 catatgctca ggtaacaagt taatttgttt acttgatttt tatgaattcc ctaaaaccta 10560
208 cgtcacccgc cccgttccca cgcgcgcgcg cagctcacia actccacccc ctcatatca 10620
209 tattggcttc aatccaaaat aaggtatatt attgatgatg ttaattaaca tgcattggatc 10680
210 catatgcggt gtgaaatacc gcacagatgc gtaaggagaa aataccgcat caggcgctct 10740
211 tccgttctct cgctcactga ctcgctgcgc tcggctcggtc ggctgcggcg agcgggtatca 10800
212 gctcactcaa aggcggtaac acggttatcc acagaatcag gggataacgc aggaaagaac 10860
213 atgtgagcaa aaggccagca aaaggccagg aaccgtaaaa aggcgcgctt gctggcgctt 10920
214 ttccataggc tccgcccccc tgacgagcat cacaaaaatc gacgctcaag tcagagggtg 10980
215 cgaaaccgca caggactata aagataccag gcgtttcccc ctggaagctc cctcgctgcgc 11040
216 tctcctgttc cgaccctgcc gcttaccgga tacctgtccg cctttctccc ttcgggaagc 11100
217 gtggcgcttt ctcatagctc acgctgtagg tatctcagtt cgggtgtaggc cgttcgctcc 11160
218 aagctgggct gtgtgcacga acccccgtt cagcccgacc gctgcgcctt atccggtaac 11220
219 tatcgctctg agtccaaccc ggtaagacac gacttatcgc cactggcagc agccactggt 11280
220 aacaggatta gcagagcgag gtatgtaggc ggtgctacag agttcttgaa gtggtggcct 11340
221 aactacggct acactagaag gacagtattt ggtatctgcg ctctgctgaa gccagttacc 11400
222 ttcggaaaaa gagttggtag ctcttgatcc ggcaaacaaa ccaccgctgg tagcgggtgt 11460
223 ttttttgttt gcaagcagca gattacgcgc agaaaaaaag gatctcaaga agatcctttg 11520
224 atcttttcta cggggtctga cgtcagtggt aacgaaaact cacgttaagg gattttgttc 11580
225 atgagattat caaaaaggat cttcacctag atccttttaa attaaaaatg aagtttttaa 11640
226 tcaatctaaa gtatatatga gtaaaacttg tctgacagtt accaatgctt aatcagtga 11700
227 gcacctatct cagcgatctg tctatttctg tcatccatag ttgcctgact ccccgctctg 11760
228 tagataacta cgatacggga gggcttacca tctggcccca gtgctgcaat gataccgcga 11820
229 gaccacgct caccggctcc agatttatca gcaataaacc agccagccgg aagggccgag 11880
230 cgcagaagtg gtccgtcaac tttatccgcc tccatccagt ctattaattg ttgccgggaa 11940
231 gctagagtaa gtagttcgcc agttaatagt ttgcgcaacg ttggtgccat tgctgcagcc 12000
232 atgagattat caaaaaggat cttcacctag atccttttca cgtagaaagc cagtccgcag 12060
233 aaacggtgct gaccccggaat gaatgtcagc tactgggcta tctggacaag ggaaaacgca 12120
234 agcgcaaaag gaaagcaggt agcttgcaat gggcttacat ggcgatagct agactgggcg 12180
235 gttttatgga cagcaagcga accggaattg ccagctgggg cgccctctgg taaggttggg 12240
236 aagccctgca aagtaaaact gatggctttc ttgccgccaa ggatctgatg gcgcagggga 12300
237 tcaagctctg atcaagagac aggatgagga tcgtttcgca tgattgaaca agatggattg 12360
238 cagcgaggtt ctccggccgc ttgggtggag aggtattctg gctatgactg ggcacaacag 12420
239 acaatcggt gctctgatgc cgcggtgttc cggctgtcag cgcaggggcg cccggttctt 12480
240 tttgtcaaga ccgacctgtc cgggtgccctg aatgaactgc aagacgaggc agcgcggtta 12540
241 tcgtggctgg ccacgacggg cgttccttgc gcagctgtgc tcgacgttgt cactgaagcg 12600
242 ggaagggact ggctgctatt gggcgaaagt ccggggcagg atctcctgtc atctcacctt 12660
243 gctcctgccg agaaagtatc catcatggct gatgcaatgc ggcggctgca tacgcttgat 12720
244 ccggtacct gcccatcoga ccaccaagcg aaacatcgca tcgagcgagc acgtactcgg 12780
245 atggaagccg gtcttgctga tcaggatgat ctggacgaag agcatcaggg gctcgcgcca 12840
246 gccgaactgt tcgccaggt caaggcgagc atgcccagc gcgaggatct cgtcgtgacc 12900
247 catggcgatg cctgcttgcc gaatatcatg gtggaaaatg gccgcttttc tggattcatc 12960
248 gactgtggcc ggctgggtgt ggcggaccgc tatcaggaca tagcgttggt taccctgat 13020
249 attgctgaag agcttgccgg cgaatgggct gaccgcttcc tcgtgcttta cggatategc 13080
250 gctcccgatt cgcagcgcat cgccttctat cgccttcttg acgagttctt ctgaattttg 13140
251 ttaaaatttt tgtaaataca gctcattttt taaccaatag gccgaaatcg gcaaaatccc 13200

```

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/785,156

DATE: 11/24/2004
TIME: 12:41:53

Input Set : A:\3840-006-27.ST25.txt
Output Set: N:\CRF4\11242004\J785156.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:4; N Pos. 349

Seq#:5; N Pos. 335

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/785,156

DATE: 11/24/2004

TIME: 12:41:53

Input Set : A:\3840-006-27.ST25.txt

Output Set: N:\CRF4\11242004\J785156.raw

L:392 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:300

L:479 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:300